

STATE OF IDAHO  
Department of Fish and Game  
Joseph C. Greenley, Director

Project Closing Report  
RECONSTRUCTION OF FISH SCREEN S-28  
LOCATED ON UPPER SALMON RIVER NEAR CHALLIS, IDAHO

Project No. 48274001

Contract No. 03-5-208-00058

Period Covered: May 1, 1975 to September 30, 1976

Columbia River Fisheries Development Program

March, 1977

# CONSTRUCTION PROJECT

## Project Closing Report

### Statement of Accomplishments

This project consisted of removing an old louver type fish screen located in a water diversion canal on the Salmon River near Challis, Idaho and constructing a new rotary drum screen installation.

The old concrete structure was partially removed with portions of the walls and floor being retained. The new structure was constructed on the same site taking advantage of the retained structural elements. New construction included some walls, all piers, trash racks and an overhead hoist system to place and remove the new rotary drum screens.

A consulting engineering firm was engaged to perform the final design and drafting of plans for the structure. All on site construction was accomplished by force account with Idaho Department of Fish and Game employees. The four rotary drum screens were purchased from the State of Washington Department of Fisheries screen shop in Yakima, Washington under a previous project. In-stallation and electrical power were included in this project.

On site work started in the fall of 1975 after the irrigation season was completed. The demolition of a portion of the old concrete, excavation and most of the new concrete walls were completed prior to work stoppage due to cold weather.

Work resumed again in early spring of 1976, and the project was completed prior to the start of the irrigation season and operated satisfactorily during the entire season.

There are several small modifications to the installation that will improve the operation of the screen system. These modifications are as follows:

1. Increase clearance height of the emergency bypass gates.
2. Install a baffle up stream of the screens on the river side of the channel to improve the velocity distribution across the screens.
3. Install a regulating gate on the bypass to give better control of the bypass water flow.

These modifications are minor and will be completed in the near future with O & M funds.